

Figure 1

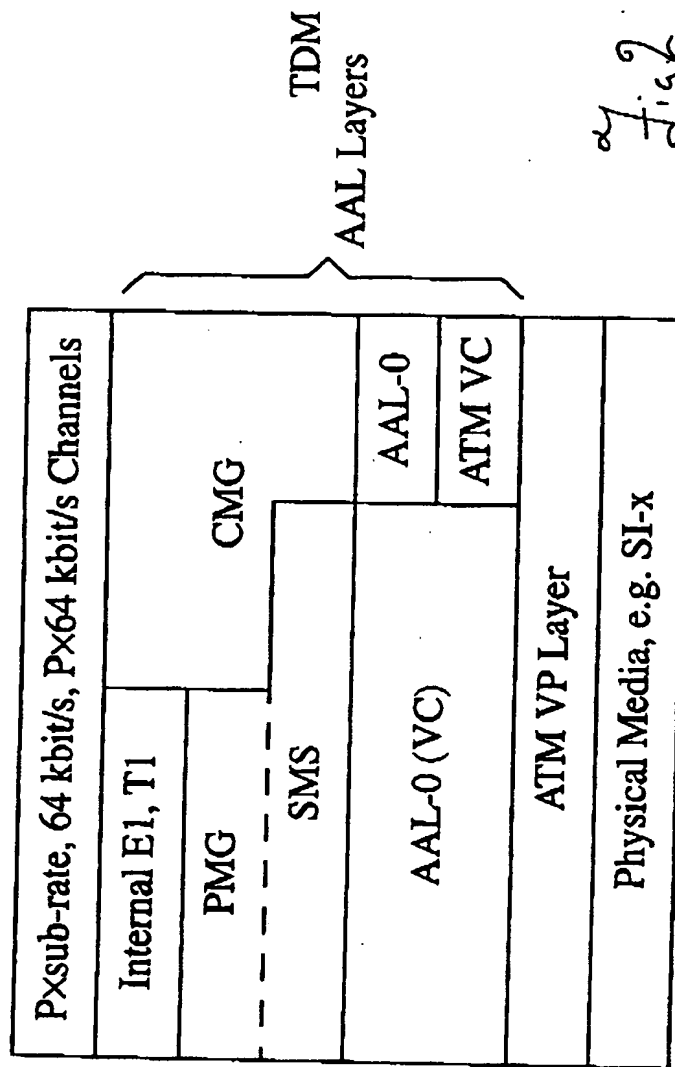


Fig. 2

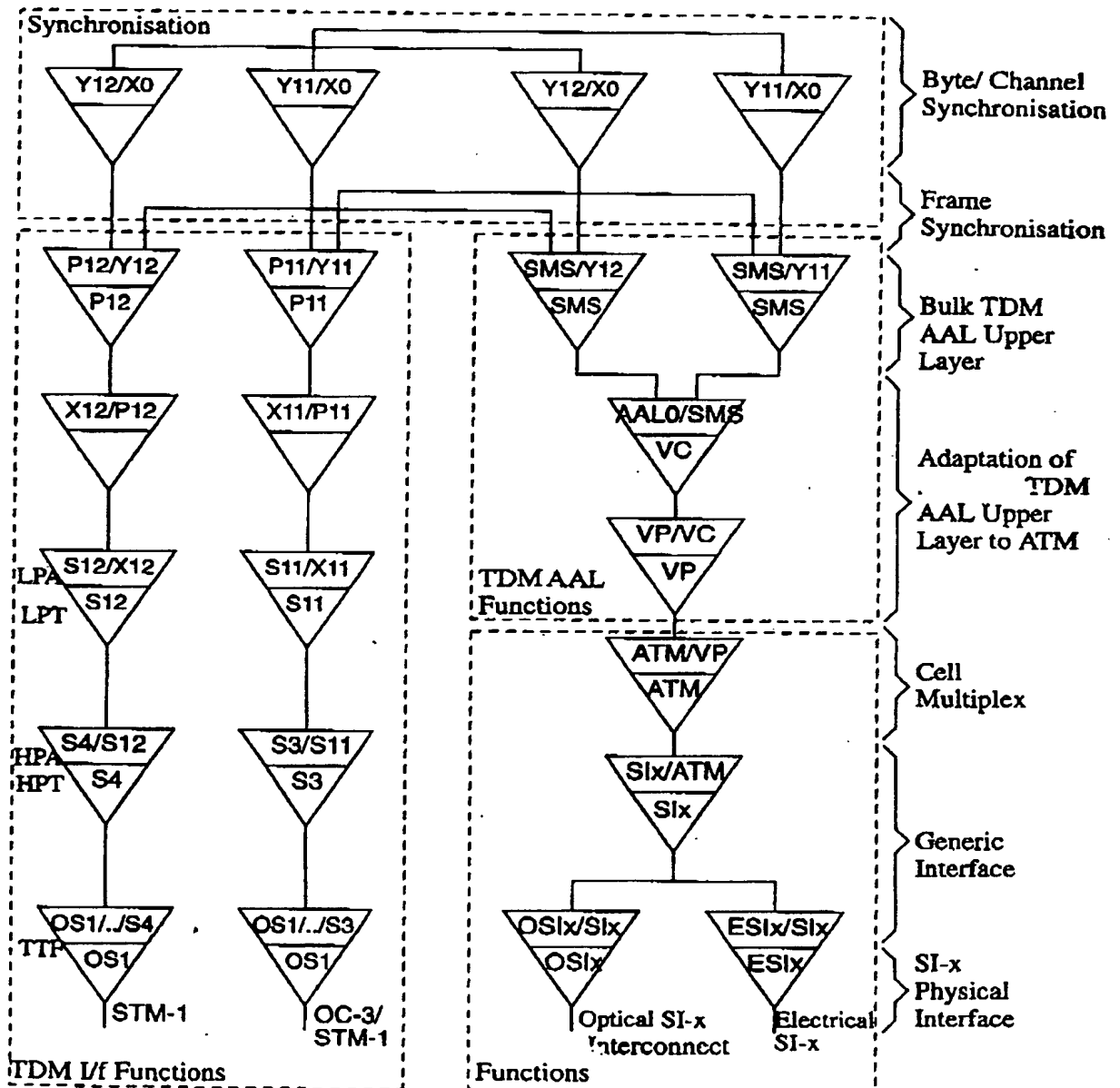


Fig. 4

a) Asynchronous Input Primary Multiplex Signals (E1s)

| | | | | |
|----|------------------|------------------|------------------|------------------|
| #A | (n-1) 31 0 | (frame n) 31 0 | (frame n+1) 31 0 | (frame n+2) |
| #B | (frame n-1) 31 0 | (frame n) 31 0 | (frame n+1) 31 0 | (frame n+2) |
| #C | 0 | (frame n-1) 31 0 | (frame n) 31 0 | (frame n+1) 31 0 |

b) Frame Synchronized Primary Multiplex Signals (E1s)

| | | | | |
|----|------|------------------|------------------|--|
| #A | 31 0 | (frame n) 31 0 | (frame n+1) 31 0 | |
| #B | 31 0 | (frame n) 31 0 | (frame n+1) 31 0 | |
| #C | 31 0 | (frame n-1) 31 0 | (frame n) 31 0 | |

equipment frame synchronization reference

c) Byte Synchronized Primary Multiplex Signals (E1s)

| | | | | | | |
|----|-------------|----------|-------------|------------|-------------|-------|
| #A | (n) 15 16 | (n) 31:0 | (n+1) 15 16 | (n+1) 31:0 | (n+2) 15 16 | (n+2) |
| #B | (n) 7 8 | (n) 31:0 | 7 8 | (n+1) 31:0 | 7 8 | (n+2) |
| #C | (n-1) 23 24 | :0 | (n) 23 24 | :0 | (n+1) 23 24 | (n+1) |

Pointer Value

d) Byte Synchronized E1s after Switching: null switch

| | | | | | | |
|----|------------|-----------|------------|-------------|----------|-------|
| #A | (n-2) 31 0 | (n) 15:16 | (n-1) 31 0 | (n+1) 15:16 | (n) 31 0 | (n+2) |
|----|------------|-----------|------------|-------------|----------|-------|

timeslot integrity for P×64 kbit/s lost at sync boundary

e) Frame Slipping

for fast i/p, buffer store full

| | | | |
|------|----------------|------------------|-------------|
| 31 0 | (frame n) 31 0 | (frame n+2) 31 0 | (frame n+3) |
|------|----------------|------------------|-------------|

frame n+1 removed

for slow i/p, buffer store empty

| | | | |
|------|----------------|----------------|-------------|
| 31 0 | (frame n) 31 0 | (frame n) 31 0 | (frame n+1) |
|------|----------------|----------------|-------------|

frame n repeated

f) Byte Slipping

for fast i/p, buffer store full

| | | | | |
|-----------|----------|-------------|------------|-------------|
| (n) 15 16 | (n) 31:0 | (n+1) 15 17 | (n+1) 31:0 | (n+2) 15 17 |
|-----------|----------|-------------|------------|-------------|

byte 16 of frame n+1 removed

Original Pointer Value

New Pointer Value

for slow i/p, buffer store empty

| | | | | |
|-----------|----------|-------------|------------|-------------|
| (n) 15 16 | (n) 31:0 | (n+1) 15 15 | (n+1) 31:0 | (n+2) 14 15 |
|-----------|----------|-------------|------------|-------------|

byte 15 of frame n+1 repeated

Original Pointer Value

New Pointer Value

4:55

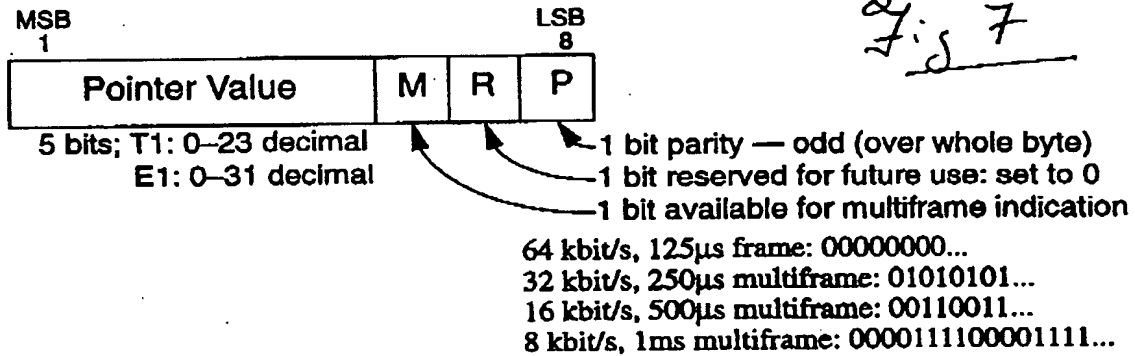
The diagram illustrates the mapping of pointer bytes to timeslot bytes. It shows three input blocks for #1, #2, and #N, each containing a 'ptrs' field and a 'timeslots' field. These are mapped to a single output block containing 'ptrs' and 'timeslots' fields. The mapping is shown by lines connecting the input fields to the output fields. The output block is labeled '4 bytes 4N pointer bytes' and '96N or 128N timeslot bytes'.

**Nx Primary Multiplex Groups
of 96/128 timeslots +4 pointer bytes
+ label field / 125µs frame**

**Secondary Multiplex Signal
of Nx100+4 bytes / 125μs frame
or Nx132+4 bytes / 125μs frame**

4:60

Pointer Byte Format



Pointer Bytes for Primary Multiplex Group-21

Pointers for 4 \times T1s

| | | | |
|----------|----------|----------|----------|
| 1st byte | | 4th byte | |
| #a: 0-23 | #b: 0-23 | #c: 0-23 | #d: 0-23 |

Pointers for 3 \times E1s

| | | | |
|-----------|----------|----------|----------|
| 1st byte | | 4th byte | |
| fixed =24 | #a: 0-31 | #b: 0-31 | #c: 0-31 |

↖ E1 group indication

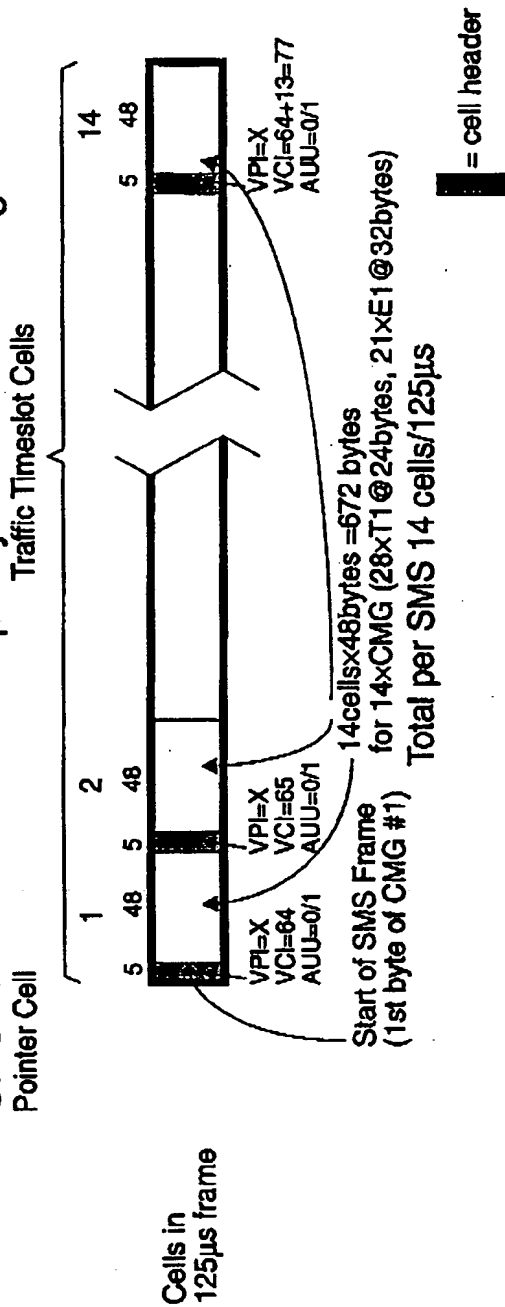
Pointer Bytes for Primary Multiplex Group-22

Pointers for 4 \times E1s

| | | | |
|----------|----------|----------|----------|
| 1st byte | | 4th byte | |
| #a: 0-31 | #b: 0-31 | #c: 0-31 | #d: 0-31 |

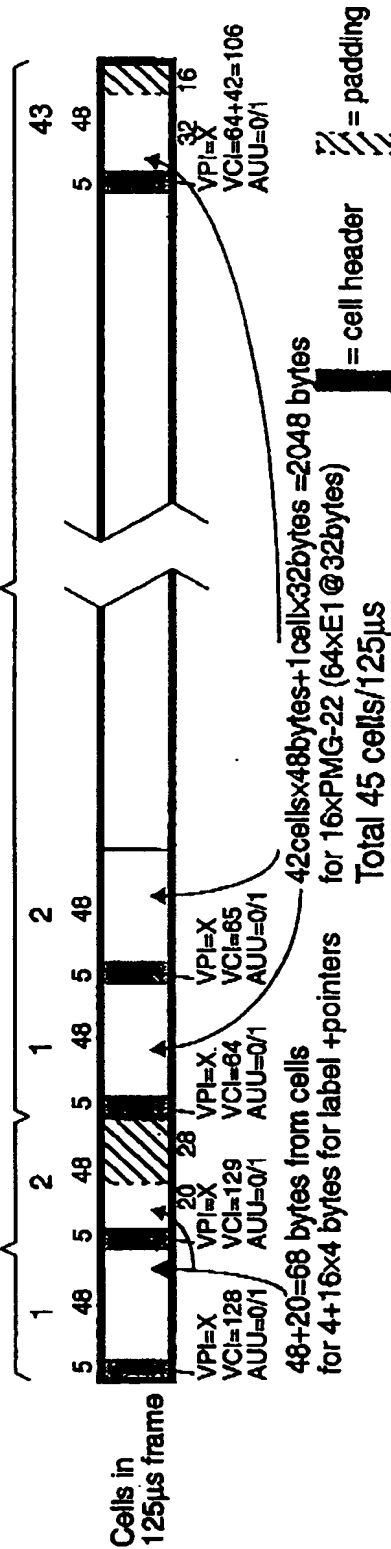


SMS in AAL-0 for T3's Capacity of timeslots using 14xCMG



[illegible]

Traffic Timeslot Cells



SMS in AAL-0 for T3's Capacity of timeslots using 7xPMG-21

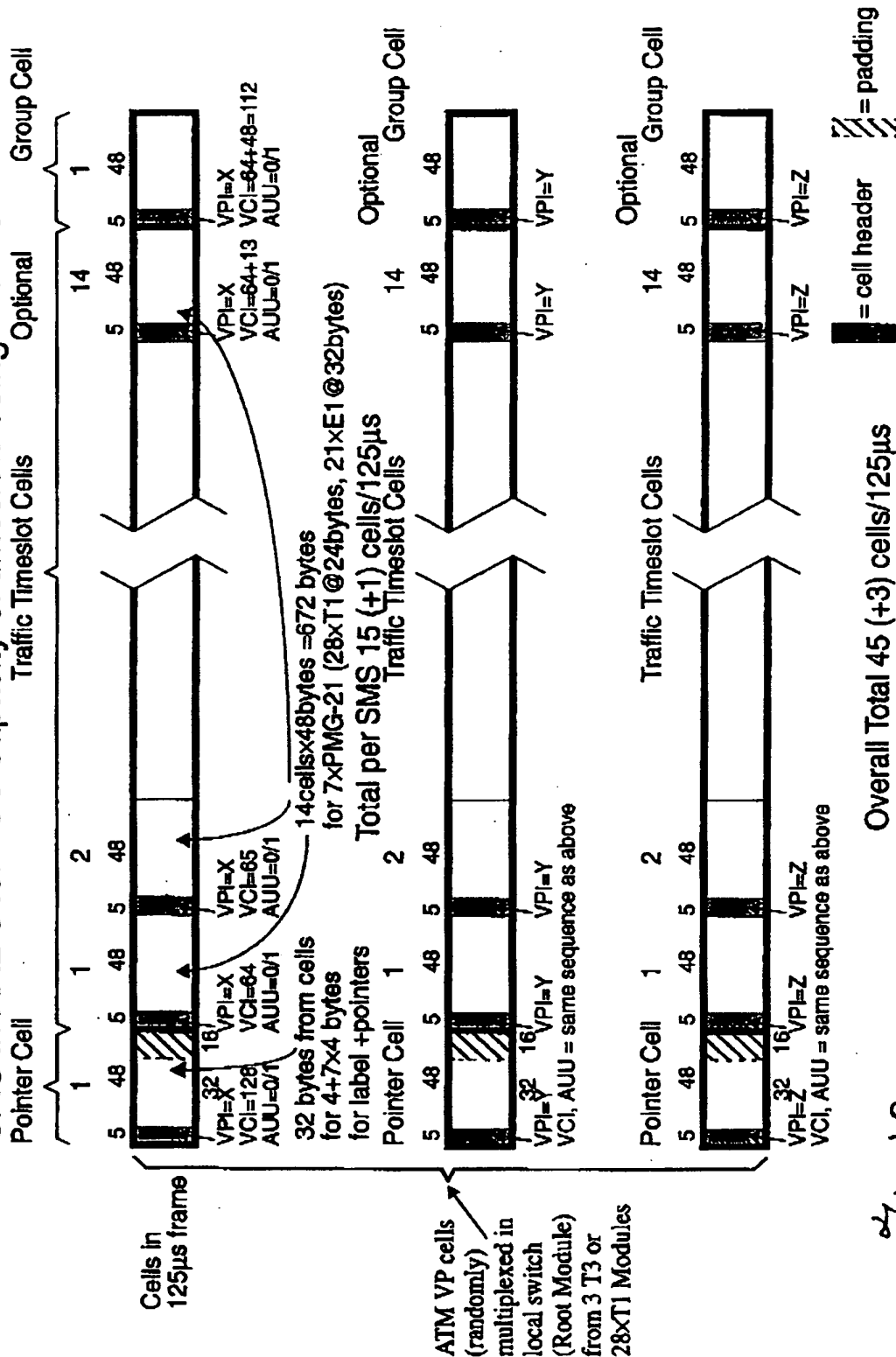


Fig 10

| Pointer Cell | Traffic Timeslot Cells | Optional | Group Cell |
|--------------|------------------------|----------|------------|
| | | | |

